



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-1247; Project Identifier MCAI-2021-01066-T; Amendment 39-22200; AD 2022-21-01]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule; request for comments.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2021-06-07, which applied to certain Airbus SAS Model A330-200 series and A330-300 series airplanes. AD 2021-06-07 required repetitive detailed inspections of the courier area oxygen system (CAOS) and replacement of affected parts if necessary. Since the FAA issued AD 2021-06-07, improved flexible oxygen hoses have been developed. This AD continues to require repetitive detailed inspections of the CAOS and replacement of affected parts if necessary. This AD also requires replacing each affected part with an improved serviceable part, which is terminating action for the repetitive inspections. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of

certain other publications listed in this AD as of April 20, 2021 (86 FR 17512, April 5, 2021).

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to [regulations.gov](https://www.regulations.gov). Follow the instructions for submitting comments.
- Fax: 202-493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Elbe Flugzeugwerke GmbH Customer Support, Grenzstraße 1, 01109 Dresden, Germany; phone: +49 351 8839 2749; fax: +49 351 8839 2125; email: efw.techpub@efw.aero; website: elbeflugzeugwerke.com/en/. You may view this referenced service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2022-1247.

Examining the AD Docket

You may examine the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2022-1247; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket

contains this AD, the mandatory continuing airworthiness information (MCAI) any comments received, and other information. The street address for the Docket Operations office is listed above. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued AD 2021-06-07, Amendment 39-21474 (86 FR 17512, April 5, 2021) (AD 2021-06-07), for certain Airbus SAS Model A330-200 series and A330-300 series airplanes. AD 2021-06-07 was prompted by reports of cracked flexible hoses in the CAOS. AD 2021-06-07 required repetitive detailed inspections of the CAOS and replacement of affected parts if necessary. The FAA issued AD 2021-06-07 to address cracked CAOS hoses. This condition, if not addressed, could lead to oxygen leakage in the flexible hoses of the CAOS, which, in combination with in-flight depressurization or smoke evacuation procedure, could result in injury to occupants of the courier area.

Actions Since AD 2021-06-07 Was Issued

Since the FAA issued AD 2021-06-07, improved flexible oxygen hoses have been developed and EASA and the FAA have determined that replacement of each affected part with a new flexible oxygen hose is necessary to address the unsafe condition.

European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2021-0173, dated July 21, 2021 (EASA AD 2021-0173) (also referred to as the MCAI), to correct an unsafe condition for certain Airbus SAS Model A330-243, A330-322, and A330-343 airplanes.

You may examine the MCAI in the AD docket at [regulations.gov](https://www.regulations.gov) by searching for and locating Docket No. FAA-2022-1247.

This AD was prompted by reports of cracked flexible hoses in the CAOS, and the development of, and the development of improved flexible oxygen hoses. The FAA is issuing this AD to address cracked CAOS hoses. This condition, if not addressed, could lead to oxygen leakage in the flexible hoses of the CAOS, which, in combination with in-flight depressurization or smoke evacuation procedure, could result in injury to occupants of the courier area. See the MCAI for additional background information.

Change to the Applicability of AD 2021-06-07

The applicability of AD 2021-06-07 is Airbus SAS Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes that were converted to freighter airplanes in accordance with FAA supplemental type certificate (STC) ST04038NY and STC ST04045NY. However, the applicability of this AD is limited to Model A330-243, -322, and -343 airplanes having manufacturer serial numbers 0116, 0127, 0231, 0600, 0610, 0709, 0777, and 0781. Due to a design change introduced during passenger-to-freighter conversion, airplanes converted in the future will not be affected by the identified unsafe condition.

Related Service Information under 1 CFR Part 51

Elbe Flugzeugwerke GmbH (EFW) has issued Service Bulletin EFW-SB-35-0001, Revision 01, dated July 3, 2020; and Service Bulletin EFW-SB-35-0002, Revision 01, dated June 22, 2020. This service information describes procedures for repetitive detailed inspections (including functional tests) of the CAOS to detect any leakage or damage (cracking) in the 32209-series oxygen distribution hoses installed in the courier area and in lavatory A, and replacement.

EFW has also issued Service Bulletin EFW-SB-35-0003, dated January 27, 2021; and Service Bulletin EFW-SB-35-0006, dated June 9, 2021. This service information

describes procedures for modifying the CAOS by replacing the 32209-series oxygen distribution hoses with improved flexible oxygen hoses.

This AD would also require Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, dated March 8, 2019; and Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, dated September 2, 2019, which the Director of the Federal Register approved for incorporation by reference as of April 20, 2021 (86 FR 17512, April 5, 2021).

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

FAA's Determination

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI and service information referenced above. The FAA is issuing this AD because the FAA evaluated all pertinent information and determined the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Requirements of this AD

This AD requires accomplishing the actions specified in the service information described previously.

FAA's Justification and Determination of the Effective Date

There are currently no domestic operators of these products. Accordingly, notice and opportunity for prior public comment are unnecessary, pursuant to 5 U.S.C. 553(b)(3)(B). In addition, for the forgoing reason(s), the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

Comments Invited

The FAA invites you to send any written relevant data, views, or arguments about this AD. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2022-1247; Project Identifier MCAI-2021-01066-T” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to regulations.gov, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov. Any commentary that the

FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act (RFA)

The requirements of the RFA do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without notice and comment, RFA analysis is not required.

Costs of Compliance

Currently, there are no affected U.S.-registered airplanes. If an affected airplane is imported and placed on the U.S. Register in the future, the FAA provides the following cost estimates to comply with this AD:

Estimated costs for required actions

Action	Labor cost	Parts cost	Cost per product
Retained actions from AD 2021-06-07	20 work-hours X \$85 per hour = \$1,700	\$0	\$1,700
New actions	7 work-hours X \$85 per hour = \$595	\$13,485	\$14,080

The FAA estimates the following costs to do any necessary on-condition action that would be required based on the results of any required actions. The FAA has no way of determining the number of aircraft that might need this on-condition action:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
7 work-hours X \$85 per hour = \$595	\$13,485	\$14,080

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator.

Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by:

a. Removing Airworthiness Directive (AD) 2021-06-07, Amendment 39-21474 (86 FR 17512, April 5, 2021); and

b. Adding the following new AD:

2022-21-01 Airbus SAS: Amendment 39-22200; Docket No. FAA-2022-1247; Project Identifier MCAI-2021-01066-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2021-06-07, Amendment 39-21474 (86 FR 17512, April 5, 2021) (AD 2021-06-07).

(c) Applicability

This AD applies to Airbus SAS Model A330-243, -322, and -343 airplanes, certificated in any category, converted to freighter airplanes in accordance with FAA supplemental type certificate (STC) ST04038NY and STC ST04045NY, having manufacturer serial numbers 0116, 0127, 0231, 0600, 0610, 0709, 0777, and 0781.

(d) Subject

Air Transport Association (ATA) of America Code 35, Oxygen.

(e) Reason

This AD was prompted by reports of cracked flexible hoses in the courier area oxygen system (CAOS), and the development of improved flexible oxygen hoses. The FAA is issuing this AD to address cracked CAOS hoses. This condition, if not addressed, could lead to oxygen leakage in the flexible hoses of the CAOS, which, in combination with in-flight depressurization or smoke evacuation procedure, could result in injury to occupants of the courier area.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definitions

The definitions in paragraphs (g)(1) through (3) of this AD apply.

(1) An affected part is a 32209-series oxygen flexible hose used in the CAOS, having a part number specified in figure 1 to paragraph (g)(1) of this AD.

Figure 1 to paragraph (g)(1) – Affected parts and improved serviceable parts

Affected Parts	Improved Serviceable Parts
32209H0136K000	A26157-01
32209E0314F090	A26008-01
32209E0190C	32301E0200C
32209E0230C	A26007-01
32209E0266C	A26009-01

(2) A serviceable part is an affected part that is new (never previously installed), or that, before further flight after installation into the CAOS, has passed an inspection and functional test (no leakage or damage found) as specified in paragraph (h) of this AD.

(3) An improved serviceable part is a flexible hose having a part number as specified in figure 1 to paragraph (g)(1) of this AD.

(h) Retained Repetitive Inspections, with Revised Service Information

This paragraph restates the requirements of paragraph (h) of AD 2021-06-07, with revised service information. Within 1,600 flight hours after April 20, 2021 (the effective date of AD 2021-06-07) and thereafter at intervals not to exceed 1,600 flight hours, do a detailed inspection (including functional testing) for leakage or damage of the CAOS and lavatory A oxygen system in accordance with the Accomplishment Instructions of Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, dated March 8, 2019; Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, dated September 2, 2019; Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, Revision 01, dated

July 3, 2020; or Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002,

Revision 01, dated June 22, 2020; as applicable

(i) Retained Replacement, with Revised Service Information and a New Replacement Action Option

This paragraph restates the requirements of paragraph (i) of AD 2021-06-07, with revised service information and a new replacement action option. If, during any inspection required by paragraph (h) of this AD, any leakage or damage (i.e., cracking) is found: Before further flight, do the actions specified in paragraph (i)(1) or (2) of this AD:

(1) Replace the affected part with a serviceable part, as defined in paragraph (g)(2) of this AD, in accordance with the Accomplishment Instructions of Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, dated March 8, 2019; Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, dated September 2, 2019; Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, Revision 01, dated July 3, 2020; or Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, Revision 01, dated June 22, 2020; as applicable.

(2) Replace each affected part with an improved serviceable part, as defined in paragraph (g)(3) of this AD, in accordance with the Accomplishment Instructions of Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0003, dated January 27, 2021; or Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0006, dated June 9, 2021; as applicable.

(j) New Requirement of this AD: Modification

Unless already accomplished as specified in paragraph (i) of this AD, within 42 months after the effective date of this AD, modify the airplane by replacing each affected part with an improved serviceable part, as defined in paragraph (g)(3) of this AD, in accordance with the Accomplishment Instructions of Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0003, dated January 27, 2021; or Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0006, dated June 9, 2021; as applicable.

(k) Terminating Action

(1) Replacement of an affected part with a serviceable part, as specified in paragraph (i) of this AD, does not terminate the repetitive inspections required by paragraph (h) of this AD.

(2) Modification of an airplane by installing improved serviceable parts as required by paragraph (j) of this AD, or as specified in paragraph (i) of this AD, as applicable, terminates the repetitive inspections required by paragraph (h) of this AD for that airplane.

(l) Parts Installation Prohibition

After modifying an airplane by replacing each affected part with an improved serviceable part as required by paragraph (j) of this AD, or as specified in paragraph (i) of this AD, as applicable, no person may install an affected part on any airplane.

(m) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) *Alternative Methods of Compliance (AMOCs)*: The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the International Validation Branch, send it to the attention of the person identified in paragraph (n)(2) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.

(2) *Contacting the Manufacturer*: For any requirement in this AD to obtain instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, Large Aircraft Section, International Validation Branch, FAA;

or the European Union Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(n) Related Information

(1) Refer to EASA AD 2021-0173, dated July 21, 2021, for related information. This EASA AD may be found in the AD docket at regulations.gov by searching for and locating Docket No. FAA-2022-1247.

(2) For more information about this AD, contact Elizabeth Dowling, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email 9-avs-nyaco-cos@faa.gov.

(o) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(3) The following service information was approved for IBR on [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(i) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, Revision 01, dated July 3, 2020.

(ii) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, Revision 01, dated June 22, 2020.

(iii) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0003, dated January 27, 2021.

(iv) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0006, dated June 9, 2021.

(4) The following service information was approved for IBR on April 20, 2021 (86 FR 17512, April 5, 2021).

(i) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0001, dated March 8, 2019.

(ii) Elbe Flugzeugwerke GmbH Service Bulletin EFW-SB-35-0002, dated September 2, 2019.

(5) For service information identified in this AD, contact Elbe Flugzeugwerke GmbH Customer Support, Grenzstraße 1, 01109 Dresden, Germany; phone: +49 351 8839 2749; fax: +49 351 8839 2125; email: efw.techpub@efw.aero; website: elbeflugzeugwerke.com/en/.

(6) You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on September 26, 2022.

Christina Underwood, Acting Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

